

* REPORT ON THE BOVINE
TUBERCULOSIS AND BRUCELLOSIS
ERADICATION PROGRAM IN
THE STATE OF SONORA AS
RELATED TO THE STAGE 1
CRITERIA JUNE, 1995'

INFORMATION SUBMITTED TO THE CONSIDERATION OF THE

BINATIONAL MEXICO - U.S.A. BOVINE TUBERCULOSIS COMMITTEE

CANCUN, JUNE '95

STAGE 1 CRITERIA / BORDER STATES VETERINARIANS'
ALTERNATIVE PROPOSAL

REPORT ON THE BOVINE TUBERCULOSIS
AND BRUCELOSIS ERADICATION PROGRAM
IN THE STATE OF SONORA AS RELATED
TO THE STAGE 1 CRITERIA

PREPARED BY

COMITE DE LA CAMPAÑA DE ERRADICACION
DE LA TUBERCULOSIS BOVINA Y BRUCELOSIS
DEL ESTADO DE SONORA

JUNE, 1995

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- * *Have a functional state animal disease comitee, which includes representatives from at least three entities: Cattlemen's Union, State Government and Federal Government (SAIH)*

Name of the Committee:

Comité de la Campaña de Erradicación de la Tuberculosis Bovina y Brucelosis del Estado de Sonora.

translates as:

State of Sonora Committee of the Campaign for the Eradication of Bovine Tuberculosis and Brucellosis

Date of its formation:

On December 12, 1991 the Governor of the State signed the decree by which the campaign was declared obligatory and on the public interest and the Committee was appointed; this decree came into effect upon its publication on the State Official Bulletin on December 19, 1991.

Committee officers and members (as enacted in the decree):

PRESIDENT The Secretary for Livestock Development
of the State of Sonora Government

currently SR. LUIS COLOSIO F.
EDIFICIO SONORA SUR, 2o. PISO
CENTRO DE GOBIERNO
HERMOSILLO, SONORA
phone (62) 17-2660 fax (62) 17-2910

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SECRETARY The Delegate in Sonora of the Mexican Ministry of Agriculture, Livestock and Rural Development (now SAGAR, former SARH)

currently: ING. JORGE AMAYA A.
EDIF. MEXICO, 2o. PISO
CENTRO DE GOBIERNO
HERMOSILLO, SONORA
phone (62) 12-0124 fax (62) 13-3946

TREASURER The President of the Sonoran Cattlemen's Association UGRS

currently: C.P. AGUSTIN HURTADO
PERIFERICO ORIENTE UNION GANADERA
HERMOSILLO, SONORA
phone (62) 54-0004 fax (62) 54-0010

BOARD OF DIRECTORS: 11 District Representatives

These are cattlemen appointed by the State Governor upon nomination by the Sonoran Cattlemen's Association UGRS. Each one of these 11 cattlemen is the President of the Campaign Subcommittee on his District.

EXECUTIVE OFFICER appointed by the State Governor upon nomination by the President, the Secretary and the Treasurer

currently: ING. SALVADOR CAMPA A.
BLVD. LUIS ENCINAS 399 OTE.
HERMOSILLO, SONORA
phone (62) 13-9810 fax (62) 12-1103

TECHNICAL GROUP veterinarians under salary of SAGAR's CONETB (the National Commission for the Eradication of Tuberculosis and Brucellosis) and other personnel who perform all the operative aspects of the campaign. (Detailed ahead)

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Exact function of the Committee:

To add the abilities and resources of the cattlemen, the Federal Government and the State Government in all the activities related to the decentralized enforcement of the NOM.

This is also performed on operative decisions at the District level by a District Campaign Sub'Comitee.

Issues considered by the Committee:

On a state level, with the input from the District Subcommittees, to plan, schedule, organize, provide technical support, supervise and evaluate all the campaign activities prescribed by or regulated within the NOM; to negotiate Federal and State Governments budget appropriations and criteria for the enforcement of NOM; also negotiate with the cattlemen on a state-wide basis both the procedures to assure the effectiveness of the regulations and their participation in the funding of the campaign.

On a District level the District Sub'Comitees organize and perform the operative tasks according to the guidelines agreed at the State Committee

Decision making at the Committee:

The committee receives input from the board of directors (the 11 cattlemen who are District representatives), its officers (President, Secretary, Treasurer), the executive officer and the technical staff.

The Federal and State regulatory agencies define the guidelines for the application of NOM, other federal and state regulations.

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The executive officer and/or the technical staff propose alternatives or explain the limitations or problems encountered in performing tasks previously agreed.

A consensus is reached and the executive officer is ordered to implement the resolution.

The executive officer oversees that the technical staff and the corresponding District Sub'Comitees work out the details and apply the appropriate actions.

Comittee meetings:

At least every other month. If there are urgent issues an extraordinary meeting is held.

- * Have State regulatory authority, including effective quarantine powers, to implement and enforce a TB eradication effort.

Authority of the State of Sonora and of the Campaign Committee to eradicate tuberculosis and brucellosis.

There are provisions both in the Mexican Federal Animal Health Law and in NOM enabling the States and Municipalities to participate in sanitary campaigns.

The Political Constitution of the State of Sonora, the State Law of the Executive Power and the State Law No. 22 for Livestock are the legal foundations of the State Governor's December 1991 decree which started the campaign and formed the Committee.

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Legal foundation of the Sonora TB & BR program:

Art. numbers under the regulation name are the actual articles invoked to establish and/or enforce campaign procedures)

1. Mexican Federal Laws and Regulations:

Animal Health Law: Jun. 18, 1993, Art. 4, fr. X

NOM-007-ZOO-1993 : Norma Oficial Mexicana de Emergencia para la Campaña Nacional de Erradicación de la Tuberculosis Bovina

NOM-EM-011-ZOO-1994 : Norma Oficial Mexicana Campaña Nacional Contra la Brucelosis en los Animales

2. State of Sonora Laws and Regulations:

Constitución Política del Estado Libre y Soberano de Sonora (State Constitution) Sep. 15, 1917
Art. 79

Ley Orgánica del Poder Ejecutivo del Estado de Sonora (State Executive Power Organic Law) Dec. 27, 1985
Arts. 5, 9, 32, 35, 37

Ley No. 22 de Ganadería para el Estado de Sonora (State Livestock Law) Jun 30, 1983
Arts. 1, 2, 6, 88, 109, 115, 149 - 155, 222 - 230

Decreto que declara de interés público la realización de la campaña de erradicación de la tuberculosis bovina y de la brucelosis del Estado de Sonora, y constituye el Comité que implementará dicha campaña. (Decree that declares on the public interest the campaign for the eradication of bovine tuberculosis and brucellosis and appoints the Committee to implement it) Dec 12, 1991

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This decree, supported on a technical project, started the campaign under the current organization.

Powers authorized

In the case of the Sonora TB & BR program, the interaction of the above legal prescriptions and the practical solutions developed jointly by Committee's board of directors and technical staff results in the Committee having the authority to request:

first: all the cattlemen's compromise to abide by their respective District Sub'committee work schedule and control procedures, and the veterinarians' professional commitment to do their work according to the regulations, and

second: the enforcement by both State and Federal agencies of all the technical procedures and agreements with the cattlemen to protect all the progress achieved.

Requirements to cattlemen to test:

After having gone thru area tests covering over 98 % of all of Sonoran herds and having set up an effective export cattle test program with accredited veterinarians, currently (June '95) TB (and/or br) tests of non-export cattle are required only as part of epidemiological investigations conducted by SAGAR - CONETB (the federal agency in care of NOM enforcement) or to those few herds (less than 2 %) not yet tested. In these cases the State brand inspectors are notified to allow cattle movement only upon presentation of test certificates or to slaughter, on specific instructions of the veterinarian handling the case.

Quarantine meaning.

Upon declaration and until release by SAGDR, prohibition to move cattle except, under surveillance, to slaughter or to another quarantined destiny

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State of Sonora authority to quarantine:

Both the Mexican Federal Animal Health Law and NOM state that SAGAR is the only authority that can declare (or release) a quarantine. Because of this, the State of Sonora government is only allowed to help to make effective the quarantine by restricting and supervising cattle movement.

Quarantine enforcement:

Official SAGAR veterinarians notify the herd owner(s) and their appropriate SAGAR offices to instruct them on the issuance of federal mobilization certificates, and report the case to the State Government. This, through specific indications to state brand inspectors orders them not to issue transit permits and to report unauthorized cattle departures from quarantined herds. State police jails people and impound cattle when moved without the transit permit issued by the corresponding brand inspector.

Unauthorized or unsupervised quarantined cattle movements are subject to both federal and state fines and other penalties. (Consult legal foundations above)

Comittee authority to operate:

it is the result of adding:

- The real concern of cattlemen to keep an open access to export market, without sanitary restrictions;
- Their participation and control on the operation of the campaign;
- The Mexican Federal and the State of Sonora governments concern on improving competitiveness of cattle exports and increasing animal health with lasting results;
- The willingness of all of the above to apply hard to get money and other resources working together towards the same goal and
- The legal, technical and economical soundness of the Committee's decisions.

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- * *Have an agreement between the State Government, Federal Government and the Cattlemen's Union to accept the Norma Oficial Mexicana NOM as the minimum standard for the state eradication program*

In the case of Sonora, this agreement was signed on May 2nd, 1992

The formulation of NOM was a consequence of the work done during 1993 to update the Mexican regulations, in order to homologate them with the USDA UM&R.

The Sonora Committee had an important participation in the making of NOM, mostly through analysis and interpretation of the early (1992) campaign work and its effectiveness.

- * *Have a functional infrastructure of veterinary expertise and authority sufficient to schedule, conduct and interpret tuberculosis tests; conduct epidemiological investigations; conduct slaughter surveillance and post-mortem exams, quarantine herds, identify infected and exposed animals, and police reactor and exposed animals to slaughter or segregation units; and apply all other aspects of the TB eradication program*

veterinarians working in the eradication program

There are 13 veterinarians, 12 of them DVMs accredited by SAGAR (the Mexican Federal Ministry of Agriculture) working within the technical group of the Campaign Committee

There are also 98 DVMs accredited by SAGAR working on private practice under the Committee supervision. These are the ones who perform tests on export cattle, and several of them are under contract to perform slaughter surveillance at the small communities kill floors, on a per-head basis

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In addition to the above, there are 27 official SAGAR veterinarians, amongst these 11 who perform slaughter surveillance at the TIF (Federal Inspection Type) plants.

Veterinarians working full-time in the eradication program

The ones working at the Campaign Committee (13)

Practicing veterinarians working in the program:

As described above, 98 accredited DVMs in private practice. Some of these are under contract to work as assistants to the official SAGAR veterinarians at TIF plants.

Payment of veterinarians

12 of the 13 veterinarians working at the Committee technical group are under salary from SAGAR - CONETB

The 11 official veterinarians at the TIF plants are federal employees salaried by SAGAR

The 98 veterinarians on private practice are paid their fees by the ranchers or, in the case of slaughter inspection, by the cattle merchant (the one who buys cattle for slaughter to provide the meat retailers)

Veterinarians' training

According to their duties, each veterinarian of the above has undergone the training courses and approved the accreditation exams prescribed by the Mexican Federal Animal Health Law, its Regulations and the NOMs enforced, in the case of Sonora for both TB and brucellosis.

There have been first-time and update courses, both for accreditation and for refreshment, about regulatory issues and technical procedures. Some of the courses attended

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by the personnel working in the Sonora TB and brucellosis program are:

Official TB and brucellosis Accreditation courses conducted by SAGAR (and formerly by SARH) in Sonora. 8 courses were held since 1992 thru 1994

Training course on TB & brucellosis tests and Interpretation, conducted by Dr. Bob Meyer, USDA, and Dr. Ray Heenshaw, Arizona State Veterinarian; Rio Rico, Arizona, Aug. 1992

Training courses for campaign coordinators and supervisors conducted by CONETB: Mexico City, Feb. 1994 and Cd. Obregon, Son., July 1994

Course on TB and brucellosis sponsored by CONETB conducted by the Republic of Cuba Scientific Veterinarian Council, Mexico City, Oct. 1994

Official Accreditation on Meat Sanitary Inspection to TIF plant veterinarians by SAGAR (and formerly SARH); Hermosillo, Mar. 1994

Brucellosis Diagnostic Training Course, Hermosillo, Sep. 94

Slaughter Surveillance Training Seminars (2) conducted by Dr. Bob Meyer, USDA, and Dr. Rick Willer, Arizona State Veterinarian Tucson, Nov. 1993 and Hermosillo, Feb. 1994

TB Epidemiology Training Seminar conducted by Dr. Bob Meyer, USDA, Hermosillo, Sep. 1994

Training on the Tuberculosis Information Management System TIMS at the Center for Epidemiology and Animal Health USDA, Fort Collins, Co., March 1995

Tuberculosis Epidemiology Training Seminar conducted by USDA, Ames, Io., Apr. 95

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Veterinarians supervising the eradication program

12 accredited DVMs working within the Technical Group of the Campaign Committee:

GUSTAVO MARTINEZ, State Coordinator of CONETB
ARTURO ARRIZON, 139 "Caborca" District Supervisor
MARTIN MAZON, 140 "Magdalena" District Supervisor
ALFREDO MEDINA, 141 "Agua Prieta" District Supervisor
ALEJANDRO VAZQUEZ, 142 "Ures" District Supervisor
FERNANDO LEOS, 143 "Moctezuma" District Supervisor
LUIS NAVARRO, 144 "Hermosillo" District Supervisor
FRANCISCO RUIZ, 145 "Mazatlan" District Supervisor
JOSE CORONADO, 146 "Sahuaripa" District Supervisor
SERGIO VAZQUEZ, 147 "Guaymas" District Supervisor
HECTOR VALENZUELA, 148 "Obregon" District Supervisor
JESUS SANCHEZ, 149 "Navojua" District Supervisor

In addition to the above listed, there are other persons working for the Sonora Campaign Committee in the areas of:

- supervision of cattle coming into Sonora from other Mexican states
- scheduling export cattle tests
- organizing export cattle tests supervisions
- data processing
- forwarding the paperwork of official certificates
- support to SAGAR personnel in the follow-up of reactor and exposed animals elimination and in conducting epidemiological studies.

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Training of program supervisors

DVMs accredited by SAGAR on TB and brucellosis, all of them have attended most of the training courses listed above.

Veterinarian supervisor's payment

The National Commission for the Eradication of TB and Brucellosis CONETB pays the salaries of these 12 veterinarians.

Slaughter surveillance

Currently it is performed under two systems:

At TIF plants an official veterinarian under Mexican Federal Government salary is in charge of slaughter surveillance, according to quantity of work one or more assistant veterinarians are appointed and paid by the Committee to help the official veterinarian in handling the work load.

At the small communities kill floors or abattoirs, the Committee under agreement with the municipalities (who are the slaughter sites owners and operators) appoints an accredited independent veterinarian who performs ante and post-mortem inspection on regular kill cattle (reactors or exposed animals go to TIF plants). This veterinarian's services are paid by the owner of the slaughtered cattle on a per-head basis.

Training of personnel doing slaughter surveillance

- Must be DVMs
- Official veterinarians must be accredited on meat inspection
- All have been trained on recognition of TB-compatible lesions, TB (suspicious tissues) and brucellosis (blood) sample taking and handling

(Refer to above mentioned courses and seminars)

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- *Have initiated systematic, organized, large scale area testing and begun implementation of effective, reliable slaughter surveillance*

Initial eradication plan (1991):

Working within the then-SARH (now SAGAR) Rural Development District organization, to sweep from Northeast to South the whole State of Sonora with two whole-herd TB & brucellosis tests, eliminating reactors and preventing the entrance of untested cattle into tested areas.

After the second all herd negative test, an annual 20% of cattle six months or older would be tested for control purposes, until Sonora were declared TB & brucellosis free.

State of Sonora division for testing

SAGAR, the Mexican Ministry for Agriculture, Livestock and Rural Development has divided Sonora into 11 (eleven) Districts, based upon geographical and productive factors.

Each District has a full staff to support all the campaign activities and a District Campaign Subcommittee including the Local Cattlemen's Associations, Municipal Presidents and State officers involved in Livestock activities.

Also the State Government operates several entry point and intra-state inspection stations preventing movement of untested animals.

(See map on annex)

Current Sonora program (since NOM enactment)

One full-herd test. If herd tests negative it need not be tested again unless necessary as a part of epidemiological investigation. See progress ahead.

Export cattle is tested under Committee's supervision.

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Herds with reactors (either to TB or brucellosis) are quarantined

Herds with laboratory confirmed positive cases are cleaned either by repeating tests and reactor elimination or, if feasible, depopulation is implemented in the case of TB.

In the case of brucellosis, after a case study, a vaccination program is implemented.

Any cattle brought into Sonora from any other State must come with a current (less than 60 days old) official SAGAR certificate showing it was tested negative to both TB (and brucellosis if sexually complete) at the origin. At the entry point these animals are identified with the metallic (silver colored) SON eartag. 60 days after the origin test, the animals are tested again and released only if the whole lot comes out negative. Cattle in transit are supervised to prevent their stay and dispersal into Sonora.

Slaughter surveillance has been implemented (details ahead)

Laboratory services are available both in Sonora and elsewhere to conduct both histopathological and bacterioscopical studies on samples collected by slaughter surveillance.

There is an adequate data base allowing traceback of cattle to support epidemiological investigations. TIMS has just been implemented in Sonora.

The Sonora Campaign Committee and CONETB have veterinarians and other technicians able to conduct and interpret epidemiological studies.

Progress in testing as of May, 1995

Area tests started in Winter of 91 have reached 98 % of all Sonoran herds. See annex "Avance de pruebas"

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Future testing plans

- Conclude area tests in South Sonora in 1995 (less than 2 % of state herds not yet tested)
- Continue tests and reactor elimination in dairy herds with to prevalence less than 5 %
- Improve effectiveness of supervision over 250,000 export cattle heads tests.
- Test all cattle coming into Sonora.
- Hopefully, to need less herd tests because of tracebacks.

Slaughter surveillance status

Due to recent changes in Mexican Animal health Law, the NOM enactment and both CONETB and the Sonora Campaign Committee participation in this aspect of the TB and brucellosis detection towards their eradication, Sonora has set up since 1994 a system that improves inspection, sample taking and laboratory services.

Currently (June 1995) the expected coverage of slaughter surveillance is

TIF plants	100,000 heads / year
municipal slaughterhouses	73,000 heads / year

The figures on animals inspected, samples submitted to laboratory and laboratory results appear in the annex.

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Slaughter sites and expected slaughter surveillance coverage

In Sonora there are two kinds of slaughter sites for bovine cattle: TIF plants and so-called "municipal" slaughterhouses

TIF "Tipo Inspeccion Federal" (Federal Inspection Type) plants are operated under permanent SAGAR supervision. Each one has an official veterinarian. These are the only ones authorized to receive reactors and exposed animals,

TIF plant Number and/or Name	current slaughter heads/day	expected annual slaughter
CEDASA	40	12,600
Emp. de Magdalena	25	7,875
70 Hermosillo	150	47,000
62 VALMO	40	12,600
ARIC SONARIC Cajeme	75	23,625
SASA Navojoa	20	6,300

"municipal" plants are located mostly on smaller communities. These process only range cattle, mainly culled cows and bulls for local consumption. In Sonora there are 65 of these, but only 37 have an amount of slaughter that can sustain the veterinarian doing ante and post-mortem inspection. At the remaining 28 kill floors a slaughter of

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less than 50 head a year does not justify appointing a veterinarian under current budget limitations.

Rural Development District	Slaughter facilities in operation	Current slaughter heads/day	Expected annual slaughter
139 Caborca	3	25	7,870
140 Magdalena	5	41	12,900
141 Agua Prieta	3	28	8,820
142 Ures	7	16	5,010
143 Moctezuma	6	8	2,510
144 Hermosillo	1	5	1,570
145 Mazatan	2	5	1,570
146 Sahuaripa	2	7	2,210
147 Guaymas	3	28	8,810
148 Cajeme	2	35	11,020
149 Navojoa	3	34	10,710

Slaughter surveillance monitoring

It is performed directly by SAGAR at the TIF plants and by the District Supervisors at the municipal slaughterhouses. Both by Law and by NOM all the positive outcomes are reported to SAGAR, which with the support of the Committee conducts the prescribed epidemiological studies.

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- * *Have implemented educational aspects of the TB eradication program within the State*

Programs to educate cattlemen on the TB & brucellosis campaign

This is done mainly by releasing information and questions and answers sessions at the Local Cattlemen's Associations meetings and at fairs; specific messages through the media are also utilized. See below

Current educational activities

Radio: the program "FOMENTO GANADERO" broadcast thru State of Sonora public "RADIO SONORA" which covers all of the State relays messages and, when needed, dedicates special programs to campaign issues.

Printed material: posters, bulletins, tryptichs as needed

Stands at the State and all the smaller cattle fairs

Television and radio bulletins and press conferences

Public perception of the program

The cattlemen are well informed on the goals of the campaign and the progress achieved, as well as on the importance of protecting the officially recognized status.

The remainder of the public are aware of the benefits that the campaign is bringing mostly because of the lower risk

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of brucellosis on dairy products. In the case of bovine tuberculosis the public is aware of the benefits of the depopulation of TB-infected dairies mainly because of the impact of the State Milk Grading Service.

Ongoing support to the Sonora eradication program

it can be resumed in

Monetary: Federal and State Governments budget appropriations to complement the cattlemen's funding

Material: SAGAR-CONETB provide TB antygen and brucellosis vaccine and antigen in quantities adequate to the program needs.

Legal: both Federal and State Governments enforce all the aspects of the regulations, in order to give credibility and respect to the campaign effort.

This presentation was prepared by

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with the documents filed at the Comité de Campaña offices.